

PERKIOMEN STONE ARCH BRIDGE
Spanning Perkiomen Creek
at Ridge Pike
Collegeville
Montgomery County
Pennsylvania

HAER No. PA-310

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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HISTORIC AMERICAN ENGINEERING RECORD

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Location: Ridge Pike over Perkiomen Creek, Collegeville, Montgomery County, Pennsylvania.

Significance: The Perkiomen Stone Arch Bridge is one of the oldest stone arch bridges in the country. The length of both the entire span and its main arch are exceptional for the period.

Description: This bridge carries Ridge Pike, traditionally one of Montgomery County's main east-west routes, over Perkiomen Creek. At this point the stream flows south and is approximately 150' wide. On the western bank is the small borough of Collegeville, which developed after the bridge was built. A stone retaining wall controls this bank north of the bridge; behind the wall is the Collegeville Inn, which began in the 18th century as a public house and traveller's inn. Buildings surround each of the bridge approaches: while most accommodate businesses, there are a few homes on the south side of the west bank.

Perkiomen Bridge, like most others, is built "right" or perpendicular to the creek. However, at this point Ridge Pike travels northwest to southeast, so both approaches curve. On the western end there is a gradual northwestern bend; on the east the turn heads more sharply southeast.

The original Perkiomen Bridge opened in 1799. Designed by John Lewis, a local architect, it was 453' long and 27' wide. Carrying the roadway across the creek were five semi-circular stone arches of varying lengths: the one in the center stretched 76'; the two secondary arches were each 61'; and those on either end were 30'. These differences created a camelback bridge with a notable vertical curve. A sixth span, 56' long, supported the eastern approach and was separated from the other arches by 100'. The bridge's oblong piers were built from large stones laid in regular courses. Though the spandrels, the parapet wall, and the wing walls were all made from cut stone, only in the spandrels and the cap along the top of the wall were of regular courses.

Since 1799 the bridge has maintained its basic appearance despite numerous changes. The most significant change came in 1928 when the bridge was widened 15' to the north. Workers disassembled the original wall on this side and reconstructed it upstream, extending the arch with concrete rather than stone. The extra width created a third vehicle lane and a sidewalk along the north wall. Semi-circular columns were added above both sides of the piers, though today only those on the north rise to the top of the parapet wall. On the north the towers create bays for the placement of Victorian-style fluted light standards.

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Other changes have occurred more recently. During the 1970s parts of the eastern and westernmost arches began to collapse, and thus concrete slabs were inserted. A traffic accident required the rebuilding of the wing wall, and other sections of stonework were repointed. Sections of the arches were sealed with gunnite, as were the piers.

More rebuilding took place during 1983. New concrete was poured for each of the upstream arch rings, most of which had fallen out. All the barrels were sealed with gunnite, though the border between the stone and concrete section of the arch remains visible. The walls were repointed where necessary, as were the semi-circular columns. New precast concrete blocks were added at the top of the walls. The roadbed of the two exterior lanes was removed and the old backfill replaced with gravel. A concrete slab was added, then covered with asphalt. In order to keep traffic moving, the center lane was not repaired.

History: In 1797 the Pennsylvania legislature authorized a lottery to provide funds for the construction of a bridge across Perkiomen Creek. Located at what was called "Phillip's Ford," this bridge was designed to carry Manatawny Road, a main east-west route, on its trip from Philadelphia to Reading. Construction began in 1798, and the bridge opened on November 4, 1799. The lottery had not raised enough money to cover the cost of construction, so for the first five years travellers paid a toll. A plaque on the parapet wall names John Lewis as the architect and John Pugh, Samuel Beard, and John Burk as the masons.¹

During the 19th century traffic over the bridge grew steadily. In 1804 the Germantown and Perkiomen Turnpike Company improved an existing road, now called Germantown Pike, from Philadelphia to the east end of the bridge. The Manatawny Road was turnpiked from Philadelphia in 1816 and became known as Ridge Pike; about this time the road from Reading enjoyed similar improvements. The bridge remained free until 1867, when the company operating the turnpike from Reading built a toll booth on the western end. According to an 1884 history, displeased residents destroyed the building before it could collect any tolls. In 1872 the turnpike company again attempted to reimpose tolls, this time on the

¹ Ambler Gazette, 25 September 1898 (in scrapbook C-7, 44, p. 42, Hist. Society of Montgomery County); Norristown Times-Herald, 7 March 1938 (in scrapbook A-8, 15, p. 103); Margaret Hocker Hoover, Concerning Collegeville: A History of that Community and Somewhat of Its Neighbor--Trappe (privately published in Chestnut Hill, 1966), p. 15, 23, 24.

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eastern end. Locals also demolished this building, though in this case they did so after the state Supreme Court ruled the turnpike's charter did not allow it to collect within one mile of the bridge.²

At the beginning of the 19th century the community of "Perkiomen Bridge" contained only a "tavern, a store, and a few houses." Growth came slowly, even with increasing traffic. Though the area west of the bridge incorporated itself into the borough of Collegeville in 1896, four years later it had fewer than one thousand residents.³

It is unclear what repairs were made to the bridge during the 19th century, since records from that period do not exist. A tablet on the wall claims the bridge was "rebuilt" in 1897; a 1927 newspaper article claims the extension of a wing wall and some repointing of the masonry was undertaken at this time.⁴

Significantly clearer is the way trolley tracks were added to the south side of the roadway in 1896. Trolleys began operating in Norristown in 1893, and three years later a line along Ridge Pike had reached the eastern end of the bridge. In June an historical society went to court to keep tracks off the bridge; the Schuylkill Valley Transit Company responded by crossing the bridge without permission, "choosing to fight it out later." Service started the next month, ultimately continuing to the neighboring borough of Trappe.⁵

In the 20th century traffic on the bridge increased rapidly. Its heavy use by trolleys and cars spurred the 1928 widening, though trolleys stopped running in 1933. Though the end of this service

² F.G. Hobson, "Perkiomen Bridge," Providence Independent, June 1882; Margaret Hocker Hoover, Concerning Collegeville: A History of that Community and Somewhat of Its Neighbor--Trappe (privately published in Chestnut Hill, 1966), 14, Chapter 2; Bean, p. 1046.

³ Hoover, 15, 84.

⁴ F.G. Hobson, "Perkiomen Bridge," Providence Independent, June, 1882 (Scrapbook C-5, 15, p. 233); "What the Datestones Reveal at Some Old Bridges," Norristown Times-Herald, 27 September 1928. Cox and Foesig (Forty Fort, PA, H.E. Cox)

⁵ Harry Foesig and Harold E. Cox, Trolleys of Montgomery County, Pennsylvania (H.E. Cox, 1968), 38-40.

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freed a third lane of traffic, some continued to demand further change. In 1938 the Automobile Association of America unsuccessfully agitated for a steel and concrete replacement bridge which would eliminate the curve at the western approach and therefore allow traffic to move more quickly.⁶

Since World War II the bridge has been repaired but its dimensions have remained unaltered. Its traffic load lightened notably after 1980, when the state built a new divided highway from Valley Forge to Pottstown. This road replaced Germantown Pike as Pennsylvania Highway 422, and many cars travelling to the western section of the county now follow this faster route.

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Historian: William Wright, Summer 1994

⁶ Norristown Times Herald, 7 March 1928 (Scrapbook A-8, 15, p. 91); Foesig and Cox, 54.